

# LOG\_aLevel Water Level and Wave Measurement for Jack-Ups

Autonomous Remote Sensing of Water Level, Waves and Tides

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### LOG\_aLevel - Jack Up





- Monitoring & Operations Safety
- Water level & wave monitoring before & during operations
- Increased safety during lowering
- Sea state information for hassle free logistics of off-shore constructions
- Significantly higher efficiency of operation
- Easier and reliable decisions for the operation
- Reliable log of sea state for the principal
- Wave parameters like Hs, Hmax and Ts to estimate the load to the construction
- Ship induced Wave Measurements from other ships in the vicinity
- Load Determination for Hydraulic Engineering (Dams/Ship induced Waves etc.)
- Event Alerting System (SMS & E-Mail alarming)
- Extension of the system to complete Hydrological & Meteorological Monitoring Station
- SCADA / Fleet management integration

## LOG\_aLevel - Advantages







- accurate
- calibration-free
- robust and cost-effective
- remote sensing
- low maintenance system
- covers all kinds of water level and water dynamics

## LOG\_aLevel – Extensions

## GENERAL **ACOUSTICS**

#### Data Logger CF or SD



Integration with all possible sensors & systems including temperature, humidity, precipitation, barometric pressure, visibility and more...



2D Inductive **Current Meter** 

Multi-parameter weather station with the 6 most essential weather data

GSM/GPRS and Radio



AIS AtoN





2D Ultrasonic Anemometer

## LOG\_aLevel - Wave Direction



- In combination with the inductive 2D current meter, the wave direction can be cost-effectively estimated
- Other option includes the use of a General Acoustics ULS Advanced Field system (please contact General Acoustics or your local agent for more information)



## LOG\_aLevel - Specifications



Measuring range: up to 30m

Field accuracy: 1-2 cm

• Resolution: 1 mm

Sample rate: up to 5 Hz (user selectable)

Averaging (HW): none/10s/30s/1m/5m/10m

(SW): none/1s/2s/5s/10s/20s/30s//1m/2m/5m/10m

Time accuracy: 1 ms GPS synchronised RTC

Telemetry output: RS 232 (RS485, LAN optional)

Frequency: 30...80 kHz depending on measurement range

Power supply: 12VDC / 110-240VAC

Working temp: -20 °C up to +70 °C

Storage temp: -40 °C up to +80 °C

HYPACK integration



#### Sub-bottom Profiling for Jack-Up with additional SUBPRO1210 system

- Increased safety for deploying and retracting the jack-up legs.
- Increased stability
- Easy & quick verification of sub-bottom layers
- Identification of mud, sand, rock, as well as of the real seabed layer and lowdensity layers
- Identification of (buried) pipeline, cable and object detection
- Identification of "hollow" pocket sub surface (peats)
- Layer Density Identification for load bearing capacity and stability calculation

For more information on Sub-bottom Profiling please look at the SUBPRO1210 brochure or inquire one of our representatives



# LOG\_aLevel

Calibration and maintenance free

Robust, precise, economical and compact

Modular system to fulfil different customer requirements and easy upgrade and maintenance due to simple exchange of modules

Reliable even under extreme conditions: flood, ice, storms, debris, fog, etc.

Low installation effort

Completely autonomous operation

Worldwide approved, tested and used

Easy to use Windows-Software for data viewing, logging and control